

ABSTRACT OF THE DISCLOSURE

An air-driven microfluid control device and its method are disclosed. The control device contains an air source, a first inlet, a second inlet, a narrow sector, and an outlet. The air source is connected two the two inlets to produce an airflow. The first inlet connects to the
5 narrow sector, which then connects to the outlet. The air flows through the first inlet and the narrow sector and exits via the outlet. A fluid tunnel connects to the narrows sideways. The second inlet connects to the fluid tunnel so that the air entering the second inlet flows into the fluid tunnel. Through the interaction between the two inlets, pushing and pulling forces can be produced to control the fluid inside the fluid tunnel.